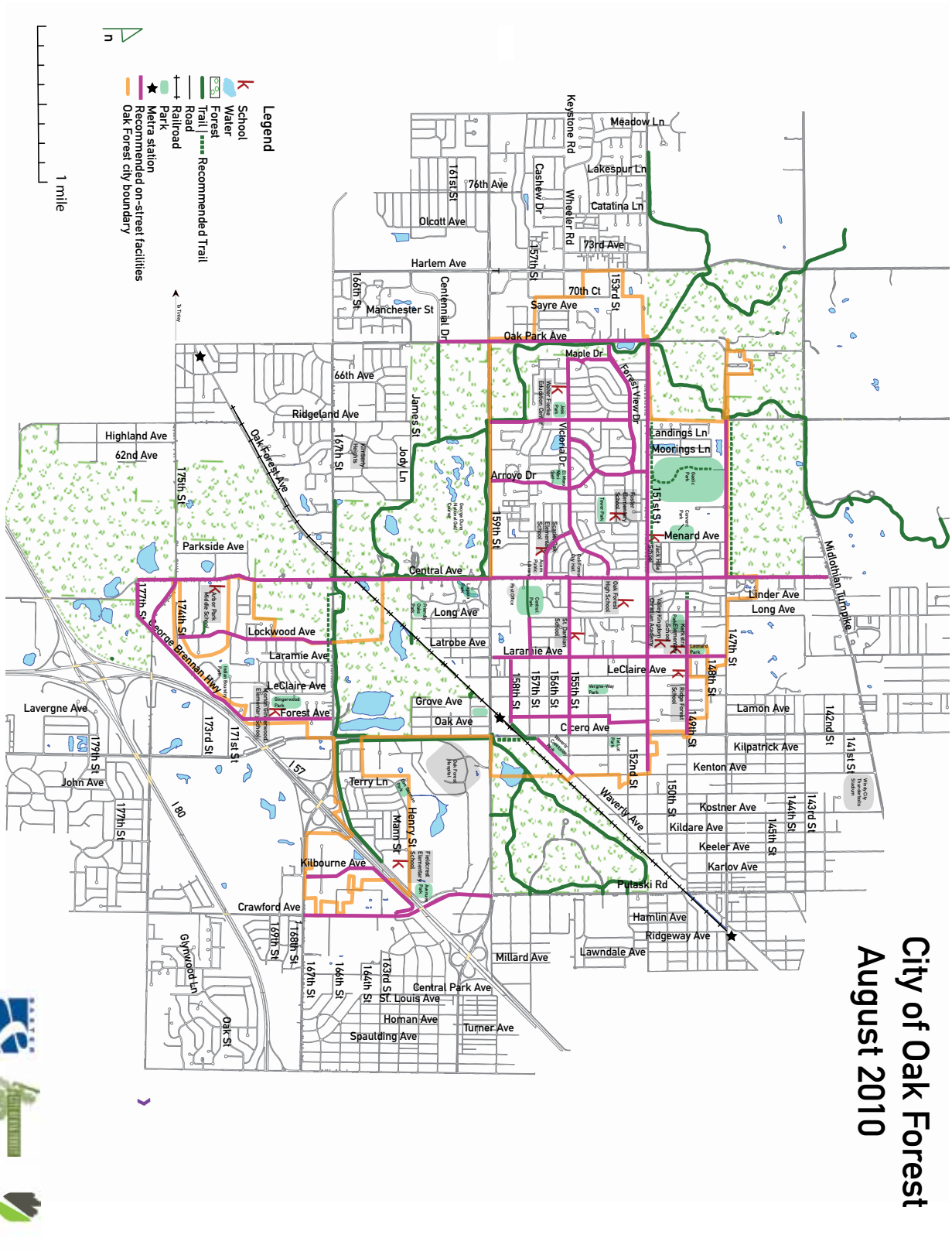
Oak Forest Non-Motorized Plan

SEPTEMBER 2010

Proposed Bikeway Network: Oak Forest, Ill.
On-street facilities and trail connections, 2010



City of Oak Forest
August 2010

Contents

Presented by:

BAXTER WOODMAN

ACTIVE TRANSPORTATION ALLIANCE

Executive Summary

In the Oak Forest Non-Motorized Plan, the City of Oak Forest engages an emerging set of expectations for a successful 21st Century community:

1. Does the community provide for and encourage an active lifestyle?
2. Is the community environmentally and economically sustainable?
3. Are quality-of-life destinations—schools, churches, municipal services, parks and trails, shopping, entertainment—safely and conveniently accessible by foot, transit or bike?

While the quality of schools, suburban values, and cost of living still attract individuals and families to suburban communities, people's life choices are increasingly influenced by wellness, sustainability and mobility considerations as well. Following this trend, Oak Forest has developed this plan to move toward a future that is sustainable, healthy, and vibrant.

The plan will guide Oak Forest's efforts to:

- Increase bicycle use and walking.
- Make bicycling and walking easy and fun transportation choices
- Expand the network of bikeways beyond the multi-use trail system.
- Create a safe and inviting environment for all residents in Oak Forest.
- Position the city as a "quality of life" center to draw new families to the area.

The plan was developed through public participation and guided by a Non-Motorized Task Force (*see Appendix A for a full listing of members)*. It guides the city towards creating safer, more convenient walking and biking connections to important destinations—businesses, schools, entertainment, transit, and the Tinley Creek Trail network. The city recognizes the plan's potential to leverage transit connections, pubs, hotels, and the Tinley Creek Trail to attract visitors for night life and outdoor recreation. The plan also adds value to the renovation of the Metra commuter rail station which, served by two Pace bus routes, allows Oak Forest to pursue transit oriented development including condominiums and premium shops.

A medium density, bedroom community largely comprised of single-family homes, Oak Forest is blessed with a robust grid of low traffic streets and easy access to regional trails. Yet it has traditionally seen mobility issues from a driving-oriented perspective dominated by the major through arterials: I-57, Cicero Avenue, Pulaski Avenue, 167th Street, 159th Street, Oak Park Avenue, and 147th Street.

Changing this perspective is not all about infrastructure; good policy must encourage and sometimes mandate consideration of bicycling, walking, and transit use. And frequent, consistent mobility education and events must precede and accompany biking and walking improvements. The Oak Forest Non-Motorized Plan includes recommendations within six key components, listed on the following page:

NON-MOTORIZED PLAN: KEY COMPONENTS

Oversight and implementation

Recommends continuing the Non-Motorized Task Force to guide and oversee the plan's implementation and evaluation, and establishing a Non-Motorized Transportation Coordinator position.

Policy

Includes polices and ordinances to encourage Complete Streets, reduce crashes caused by distracted driving, and require minimum bicycle parking facilties for new businesses and public buildings.

Recommends the development of an access management plan to consolidate drivways along 159th Street and Cicero Avenue, reducing motor vehicle/pedestrian conflict points by 50% and improving internal traffic connections and circulation.

Facilities

Improvements to the biking and walking environment are prioritized based on costs and difficulty, including:

Oak Forest Gateway/Metra–Rock Island station improvements—Improve safety and convenience for non-motorized and transit access to the station and the Midlothian Meadows trail.

Near-term network recommendations—Guidance for bicycle parking, wayfinding, and improvements to local streets; can be completed in the first three years.

Mid-term network recommendations—Guidance for Complete Streets implementation, trail connections, and improvements to state and county roads; can typically be completed in 3-6 years.

Long-term recommendations—Guidance for major intersection improvements including constructing standard roundabouts at 159th Street/Cicero Avenue and 159th Street/Oak Park Avenue.

Safe Routes to School

Includes facility recommendations for improving the bicycling and walking environment to and from Oak Forest schools. All of these recommendations could be accomplished in the near term.

Program

Provides guidance for education, encouragement, enforcement, and events. Recommendations include producing a city bicycle map, Safe Routes to School programming, mobility education strategies, events such as Open Streets, bicycle sharing programs, and other education and promotional efforts.

Evaluation and funding

Provides funding strategies and guidance on establishing benchmarks to track progress toward implementation and to measure its effectiveness through strategies such as comparing crash rates, counting parked bicycles, and performing pedestrian and cyclist counts at key intersections, the train station, and trail access points.

The City of Oak Forest hired Baxter and Woodman Engineering and the Active Transportation Alliance (Active Trans) as consultants to produce this plan. The consultants turned to the experts—Oak Forest's own residents and stakeholders—to develop the network of routes and programs. Guided by their insight, this plan will help position Oak Forest for a healthier, more sustainable, and brighter future.

Implementation and oversight objectives:

Maintain the Non-Motorized Task Force and create a Bicycle and Pedestrian Coordinator position

Continue the Non-Motorized Plan Task Force

Target for completion: Immediately

Plan stakeholders—including representatives from city departments, the Oak Forest Park District, local schools, local bike shops, resident cyclists, and the consultants—met regularly as the Non-Motorized Plan Task Force to guide and direct the plan's development. (See Appendix A for a full listing of members.) The Task Force should continue as a standing committee charged with directing and overseeing the implementation of this plan.

The Task Force should include a representative from the public works department, the police department, a local school, the economic development director and up to five residents who bicycle, walk and/or use transit. It will coordinate efforts between the city, the Oak Forest Park District, and area schools to implement the recommendations in this plan, as well as oversee the development of related programs such as Safe Routes to School, bicycling events, and adult bicycle education. The group meets quarterly to review plan progress and catalyze next steps and implementation, and it takes an active role in implementing the safety and encouragement objectives.

Hire a Bicycle and Pedestrian Coordinator

Target for completion: Three months

Create or expand a position within the community development or public works department responsible for:

- Convening the Non-Motorized Plan Task Force
- Managing the implementation of the plan's recommendations
- Coordinating with the Task Force to establish baseline walking and cycling metrics and regularly measuring changes
- Serving as point of contact for residents regarding the plan
- Coordinating with other city, county and state transportation projects
- Reporting progress annually to the city council
- Pursuing grants for the plan's implementation
- Applying for a Bicycle Friendly Community award through the League of American Bicyclists, and improving upon the standing over time.

Non-motorized plan charette at Arbor Park Middle School, May 28, 2009.Source: Katie Tully

Policy objective:

Enact policies to create a safe, convenient and encouraging bicycling and walking environment

Adopt a Complete Streets policy

Scope of work: Following accepted best practices, draft and adopt a Complete Streets policy for all Oak Forest road resurfacing and reconstruction projects to integrate the needs of pedestrians, bicyclists, and transit riders into day-to-day transportation decision making.

Target for completion: First year

Complete streets are designed and operated to enable safe access for all users of the transportation network. A complete street has no predefined facilities requirements but does allow pedestrians, bicyclists, motorists, and transit riders of all ages and abilities to safely move along and across the streets. Complete streets take the surrounding context into account by understanding and accommodating all existing and expected users of the road. A Complete Streets policy allows Oak Forest to "build in" access to and from the network, creating overall safer streets and encouraging residents to leave the automobile parked, reducing car traffic city-wide.

Both the Cook County Highways Department and the Illinois Department of Transportation (IDOT) have Complete Streets policies. A local Complete Streets policy extends consideration of walking and biking to the local street network, and adds additional leverage Oak Forest can use to persuade the outside agencies to pursue best practice bicycle, pedestrian and transit facilities in their projects.

Best practice guidance is available from the National Complete Streets Coalition (completethestreets.org), a non-profit partnership of municipal agencies and planning organizations See Appendix B for the City of Chicago's Complete Streets ordinance.

Complete street, Olympia, Wa. Source: pedbikeimages.org/Dan Burden

Adopt a bicycle parking ordinance

Scope of work: The city council adopts a bicycle-parking ordinance by 2011 that requires new or renovated multi-tenant housing developments, businesses, and public facilities to provide secure and convenient bicycle parking for public use. Guidance regarding capacity and sample language are located in Appendix C.

Target for completion: First year

Ample and sufficient bicycle parking is important as it enables residents to cycle to local destinations such as schools, recreational facilities, local commercial establishments and municipal buildings. Bicycle parking also encourages people to ride bikes and reminds them that cycling is an accessible option.

Adopt a distracted driver ordinance

Scope of work: The city council adopts a distracted driver ordinance by 2011 that prohibits drivers from using hand-held mobile phones while operating a motor vehicle on roadways within the city. Sample language is located in Appendix D.

Target for completion: First year

In the Southland, a distracted driver ordinance has been passed by Midlothian, Oak Forest's neighboring community, and is being considered in multiple other communities. As many drivers are unaware of crossing community boundaries, the City should consider partnering with South Suburban Mayors and Managers Association to encourage its fellow Southland communities to pass similar ordinances.

Develop an access management plan

Scope of work: Oak Forest develops an access management plan to reduce the number of driveways along 159th Street and Cicero Avenue by 50%, and to expand cross-connections between parking lots for better circulation of traffic and reduced entrance/exit traffic on the arterials.

Target for completion: Three years

Driveways proliferate along 159th Street and Cicero Avenue, with many drives sometimes serving the same modest parking lot, and many neighboring locations are prohibited from sharing a single driveway by poor circulation/connectivity between parking lots. Every driveway creates an uncontrolled intersection for crossing sidewalk traffic as well as motorized traffic. Reducing turning and sidewalk conflicts by reducing the number of access drives will improve safety for all users, provide more streetscaping opportunities, and create a more pleasant pedestrian experience.

Sign on Forest View Drive. Source: Steve Buchtel

Oak Forest Gateway objective:

Develop world-class non-motorized accommodations at the Metra–Rock Island station

Legat Architects has been contracted to plan, design and construct the city's redevelopment of its Metra station and surrounding area at Cicero Avenue and 159th Street as a signature gateway for the city. Plans are underway for a mixed-use, transit-oriented development that includes a new Metra–Rock Island station and residential, retail and restaurant space. The consultants for the non-motorized plan met with Legat and city staff on September 9, 2009 to discuss bicycle and pedestrian accommodations within the project.

Oak Forest's transit-oriented development of its Metra site opens an exciting opportunity to integrate bicycling, walking and transit facilities to create a true multi-modal transportation hub alongside stores, restaurants, housing and forest preserve trails. The development's access to the Tinley Creek Trail system additionally offers the opportunity to generate day trips and "staycations" for Chicago residents via the transit connection and Metra's bikes-on-trains policy.

Pedestrian refuge islands at Metra station drive entrances will slow turning vehicles entering from 159th Street and Cicero Avenue.

Source: pedbikeimages.org/Dan Burden

Bike lanes in a Target parking lot, Boulder, Co. Shared lane markings on access and circulating drives will slow traffic, encourage good cycling and driving behavior, and raise the comfort level of cyclists riding through the site.

Source: Martha Rokowski

ACCESS & CIRCULATION PRIORITIES | 0-2 years

Already, Oak Forest's train stop has become a popular weekend embarkation point for cyclists from Chicago who enjoy exploring the Southland's regional trail system. These improvements can begin returning value immediately without further site development:

Site access and circulation

Scope of work: Split inbound/outbound lanes with a raised-curb pedestrian island at each vehicle entrance along 159th Street and Cicero Avenue. Move crosswalks up the throat of the drive, away from turning radii.

Add shared lane markings to all circulating drives to help direct cyclists and to raise driver awareness and consideration of cyclists.

Moveable planters and paint can create temporary, low cost pedestrian refuge islands. Providing refuge in the middle of access drive crosswalks simplifies sidewalk crossings, slows vehicle turning movements, and raises the profile of sidewalk users.

Wayfinding and information

Scope of work: Install a well-marked bicycling & transit information kiosk that provides the location of parks, stores, schools and trails as well as Pace and Metra connections in the community.

Install wayfinding signs directing cyclists from the train platform to Pace bus stops, 158th Street access, the Cicero Avenue pedestrian bridge, and the Midlothian Meadows/ Tinley Creek Trail.

SITE DEVELOPMENT PRIORITIES

Improve bicycle access to Midlothian Meadows

Scope of work: Construct an 8'-wide path "short cut" that provides clear and direct access between the site's southeast corner and the northwest corner of the 159th Street/Cicero Avenue intersection.

Construct an expanded queueing space on the northwest corner of 159th Street/Cicero Avenue intersection by moving shrubbery and paving the surface. Consider using pavers to enhance the gateway's current landscape elements.

Currently, cyclists and pedestrians must use the sidewalk along 159th Street to access the Cicero Avenue crossing, which is inconvenient and inadequate for cyclists and pedestrians to share.

Improve station's bicycle access and parking

Scope of work: Add "bike channels," concave 3"-wide ramps near staircase edges, to commuter platform stairways and all access stairs from 159th Street. Bike channels assist cyclists walking their bicycles up and down the stairs, eliminating the need to carry them.

Provide sheltered bicycle parking for short-term and daily parking. High capacity, short-term parking racks should be sheltered from precipitation and located within 50' of train platform access or the train station entrance; individual racks, such as small footprint, ring-and-post racks, should be located within 50' of each merchant entrance.

Provide higher security, credit card operated lockers for longer term bicycle parking. Lockers also encourage residents requiring more peace of mind to commute by bicycle. These day-use lockers should be located as close to the Metra station as possible. Bicycle lockers provide shelter from the elements and also added security and peace of mind. Locker users should be charged a minimal amount (other U.S. cities charge 3¢/hour), which keeps the system affordable for everyone but ensures that people do not abandon bikes in the lockers for weeks at a time.

Stair channel for bicycles, Millennium Park, Chicago. Source: Marissa Dolin

Automated lockers typically function by swiping a credit card to open the door of an empty locker and swiping again to secure it. A swipe with the same card releases the bike. Cyclists without a credit/debit card can purchase a "smart card" from the city or another vender loaded with a specified dollar amount, similar to the "print" cards at many libraries and schools, to operate the lockers.

Improve connections to Pace bus service

Scope of work: Coordinate with Pace to route connecting buses through the Gateway site, and integrate connecting bus service more closely with train arrivals. Currently, Pace riders east-bound on 159th Street and north-bound on Cicero Avenue must cross these busy streets to connect with Pace bus service. The distance to the street from the train platform combined with crossing difficulties causes many missed connections, discouraging bus transit use and encouraging unsafe crossings.

159TH STREET & CICERO AVENUE PRIORITIES | 2-5 years

The Cicero Avenue/159th Street intersection plays a major role in the Gateway's ability to serve as a multi-modal and trail hub. While upgrading crosswalks is relatively easy, the other recommendations should be coordinated with IDOT's maintenance program and its Complete Streets policy.

Crosswalks and right turn signal modifications

Scope of work: Install higher visibility, zebra stripe crosswalks at all four crossings.

Signal and sign the 159th Street westbound right-turn only lane as "No Right On Red/Right on Green Arrow Only." Coordinate with pedestrian-actuated signal to prohibit right turns from the westbound right turn lane during the pedestrian phase on Cicero Avenue.

Sign other corners as "No Right on Red When Pedestrians Present."

Target completion: Two years

Pork chop refuge islands, Boulder, CO. Source: pedbikeimages.org/Dan Burden

Signal modifications and pedestrian accommodation

Scope of work: Sign all signaled left turn lanes as "left turn on green arrow only" to prohibit left turns during pedestrian phases.

Construct "pork chop" refuge medians at each intersection, deflecting and channelizing right turns to slow turning traffic, improve visibility of crossing pedestrians, and simplify pedestrian crossings; use current swept area as guidance for placement. Mountable, reinforced curbs will accommodate occasional over-sized trucks and lower maintenance costs.

Widen the existing sidewalk on the east side of Cicero Avenue from the Metra rail viaduct south to the corner at 159th Street to 8'. Relocate utilities and lighting as necessary to provide clear passage, and appropriately sign the pinch point at the viaduct.

Target completion: Five years

Metra viaduct on Cicero Avenue. Source: Steve Buchtel

Network objective:

Create a world-class bicycle and pedestrian network for Oak Forest

NEAR-TERM PRIORITIES | 1-3 years

Install bicycle parking

Scope of work: Purchase 100 bicycle parking racks for installation at all public buildings, recreation facilities, the Metra station and in merchant areas. Use the "inverted U" design favored by the City of Chicago, or racks that are functionally equivalent, preferably supporting the bicycle at two points and allowing a cyclist to secure both the front wheel and frame with one lock.

Target completion: Two years

Throughout the city, install inverted-U or functionally similar parking racks at public buildings and parks, and on publicly owned property near businesses and multi-unit residences. Racks should be located within clear view of the destination's entrance way, and preferably as close as the closest motor vehicle parking space, no more than 50 feet away.

Initially, bike parking installation should focus on existing public buildings, schools, forests preserves, parks, public service departments, the Metra station and at locations where cyclists are found to be under served in terms of capacity, convenience or security.

Oak Forest's renovation of the Metra Rock Island station, which will serve as a multi-modal and trail hub, requires a mix of high capacity rack parking for short term use and lockers suitable for overnight parking. For more details, see "Oak Forest Gateway" in this Plan.

Remaining rack installations should be driven by resident and merchant request. Street racks should be installed on public property whenever feasible.

Communities like Oak Forest benefit from adopting a bicycle parking ordinance that mandates new construction and development to include bicycle parking per the city specifications. See Appendix C for sample language.

Top: "Inverted U" and "ring-and-post" bicycle parking rack designs (Downtown Minooka, Ill. and Target, Matteson, Ill.).

Bottom: Racks can have artistic flair—Pennsy Greenway racks in Lansing, Ill. Source: Steve Buchtel

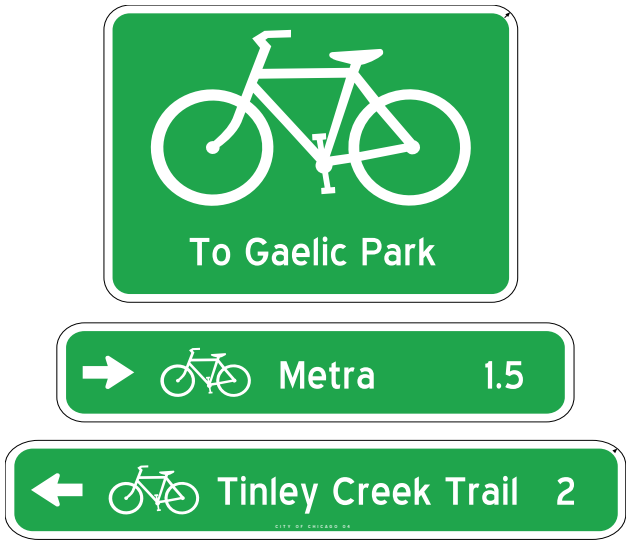
Oak Forest should consider partnering with regional municipalities that are also interested in bicycle parking in order to pursue federal grants as well as purchase a large amount of racks together, thus lowering the cost per unit. Active Transportation Alliance, the Chicago Metropolitan Agency for Planning (CMAP) and the South Suburban Mayors and Managers Association (SSMMA) can all assist in identifying other communities in the area that are interested in partnering with Oak Forest.

Sign the bicycle network

Scope of Work: Sign the Oak Forest bicycle network using signs that display destination, direction, and distance as indicated in the 2009 Manual for Uniform Traffic Control Devices (MUTCD). Include signs for connections outside the community, including Waverly Avenue (to Midlothian), Central Avenue (to Midlothian Turnpike) and Oak Forest Avenue (to Tinley Park).

Target completion: Two years

Many Oak Forest streets are already suitable for cyclists with a moderate tolerance for traffic. And many residents and most visitors are unaware of the City's many bike-friendly routes. Signing the network early-on provides immediate value and encouragement to cyclists while raising awareness among all road users of the acceptance of cycling within the city. The bikeway signs also do double-duty, appreciated by drivers and pedestrians looking for specific destinations within the city.



Wayfinding signs for bike routes.

Install shared lane markings

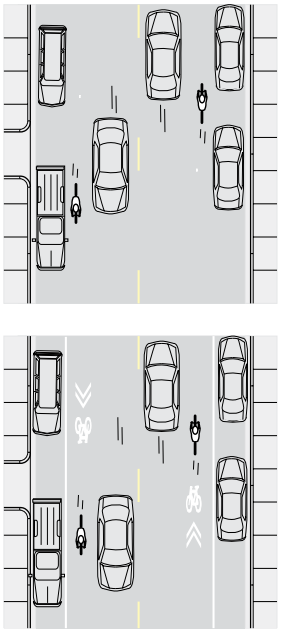
Scope of work: Install shared lane markings on bike network routes without sufficient width for 5' bicycle lanes (30' without curb side parking, 44' with curb side parking) and posted speed limits of 35 mph or less.

Target completion: Two years

Streets suitable for shared lane markings include:

- 149th Street
- 151st Street, Central to Cicero
- 155th Street
- 158th Street
- Victoria Street
- Ridgeland Avenue
- Lamon Avenue
- Central Avenue, 159th Street to 147th Street
- Boca Rio Avenue
- Arroyo Avenue
- Forest Avenue
- Lockwood Avenue
- Kilbourne Avenue

Shared lane markings remind and reinforce that the street is a shared public space where bicycling should be expected and accommodated. Shared lane markings also help bicyclists to position themselves where they will be most visible to drivers and out of reach from opening car doors, and directional chevrons encourage cycling with traffic. For drivers, shared lane markings raise awareness and acceptance of cyclists on the street, and help identify safe passing distances.



Shared lane markings with curbside parking. Source: City of Chicago

Shared lane markings require no additional street width, and on local streets can be installed when funding is available. On state and county routes, additional traffic flow and crash analysis is likely required, but shared lane markings can still be installed within a three year time frame.

The MUTCD requires that shared lane markings be placed immediately after each intersection, and at intervals not greater than 250' thereafter. The center of the markings should be placed at least 4' from the curb face or pavement edge (without curbs) where parking is prohibited, and at least 11' from curb face or pavement edge (without curbs) where street-side parking is allowed.

Where curb side parking is allowed on the bicycle network's shared lane routes, stripe parking bays with a continuous stripe 7' from the curb face to encourage parking close to the curb, control passing on the right, and lower prevailing motor vehicle speeds by narrowing the perceived width of the travel lane. Cyclists may also use the marked parking space as a de facto bike lane on streets where parking is infrequent.

Shared lane marking without street parking. Source: pedbikeimages.org/Heather Bowden

Mark traffic signal detectors

Target for completion: Two years

Scope of work: Place consistent markings at signalized intersections on the bicycle network that utilize vehicle detector loops to show cyclists where to place their bike for detection by the loop.

Source: MUTCD, 2009

Oak Forest's bicycle network incorporates key signalized intersections at high-traffic cross streets to help cyclists cross more safely, quickly and conveniently, including:

- Oak Park Avenue/159th Street
- Ridgeland Avenue/159th Street
- Arroyo Avenue/159th Street
- Central Avenue/159th Street
- Central Avenue/151st Street
- Central Avenue/147th Street
- Laramie/159th Street
- 155th Street and Cicero Avenue
- 151st Street and Cicero Avenue

Some traffic signal loop detectors will not detect a bicyclist regardless of the position of the bicycle. These loop detectors should be adjusted within reasonable limits to detect most cyclists, and should also be a near term priority.

While implementation is relatively inexpensive and straightforward, each of these signal modifications must be coordinated with IDOT and the Cook County Highway Department who has jurisdiction over the major crossing streets. The first year will largely be spent negotiating the signal modifications with these two agencies.

Stripe bicycle lanes

Scope of work: On collector and arterial streets with sufficient width and speeds less than 40 mph, establish five-foot travel lanes exclusive for bicyclists' use. Motorized vehicle travel lanes may be narrowed minimally to 10' where appropriate to allow bike lanes. Establish a policy of regular, prioritized street sweeping along bike lane routes.

Target completion: Three years (with inter-agency coordination)

Streets where bike lanes are recommended in the near term in conjunction with reducing travel lane widths to 10' in the include:

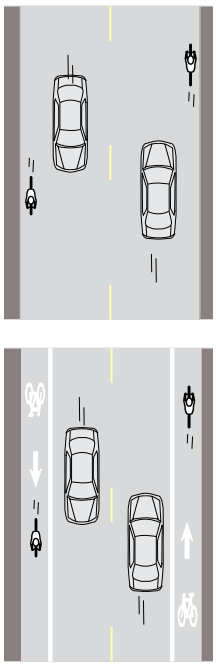
- 151st Street, Central Avenue to Oak Park Avenue (Cook County jurisdiction)
- 175th Street, George Brennan Highway to Central Avenue (Cook County jurisdiction)
- Central Avenue, 175th Street to 159th Street (Cook County jurisdiction)

Bike lanes offer a higher level of comfort than shared lane markings for drivers and most cyclists on streets with heavy traffic. They reinforce proper roadway etiquette, raise the visibility of cyclists and help bicyclists and drivers behave predictably when sharing road space. They also have proven to lower motor vehicle speeds, lessening crash severity. Bicycle lanes require regular sweeping to keep lanes acceptably free of road debris.

Because each of these essential segments of the Oak Forest street network fall under Cook County's jurisdiction, the near-term recommendation is for the city to immediately begin communicating its needs with Cook County Highways to better accommodate cyclists and pedestrians. The city should begin aggressively monitoring Cook County road improvement and maintenance plans, scanning for opportunities to coordinate the implementation of these recommendations with larger projects.

Oak Forest should also consider using jurisdictional transfer—transferring jurisdiction of a street from county or state jurisdiction to local authority, typically at the completion of a road improvement project—as a point of negotiation where appropriate. Some Southland communities, such as South Holland, Olympia Fields and Tinley Park, have used jurisdictional transfer successfully to win on-street bicycle facilities within a state or county road project that was contingent on taking ownership of the improved road.

While taking jurisdiction of a street adds cost to the local agency's maintenance obligations, streets like Central Avenue or 151st Street, west of Central Avenue could have maintenance costs mitigated by 50% or more by remaining on the Federal Aid Urban Route system. Negotiating jurisdictional transfer of Central Avenue in particular would give Oak Forest greater control over a street that could, because of its destinations, play a large role in improving many residents' quality of life.



Source: City of Chicago

Bicycle lanes, Kedzie Avenue, Olympia Fields, Ill. Source: Steve Buchtel

Trail connections: 159th Street and Ridgeland Avenue

Scope of work: Add a right turn arrow for southbound Ridgeland Avenue traffic and sign as "Right Turn on Green Arrow Only." Coordinate the green pedestrian crossing signal with Ridgeland's red right turn arrow to prevent turning movements when pedestrians and trail users are crossing 159th Street.

Upgrade pedestrian signals to countdown timers per 2009 MUTCD. Replace 159th Street's pedestrian-actuated crossing signal with visual detection.

Target completion:
Three years

Trail connections: Gaelic Park/151st Street

Scope of work: Gaelic Park, a popular regional attraction with a rich calendar of music events, sports, festivals, dining opportunities and other activities, is located on busy and narrow 147th Street, but lies adjacent to property along 151st Street, owned by Southwest Cook County Cooperative Association for Special Education and the Missionary Sisters-Benedictine convent. An easement through either of these properties would allow most of Oak Forest's population and visitors to bicycle, walk or skate to Gaelic Park, and would make a non-motorized connection for subdivision and multi-unit residents along 147th to stores and transit to the south.

Target completion: Three years

Trail connections: Park Avenue to El Vista Avenue

Scope of work: Pave the cut-through route between Park Avenue and El Vista Avenue at 149th Street.

Previously the site of a community pool, the lot between Park Avenue and El Vista Avenue now offers a shortcut route for residents to and from Laramie Avenue schools, particularly residents living near 147th Avenue and Central Avenue. Trails are best used when they provide a shortcut for cyclists and walkers.

Pedestrian network improvements

Scope of work: Upgrade all crosswalks to zebra-stripe per 2009 MUTCD, install where missing. Sign all signalized arterial intersections as "No Right on Red When Pedestrians Present."

Prioritize these corridors—159th Street, 147th Street, 167th Street, Cicero Avenue, Central Avenue, Ridgeland Avenue, Oak Park Avenue—and school zones for crosswalk installation, re-striping, and upgrading

Target for completion: Two years

Countdown pedestrian signals. Source: James Wagner.

MID-TERM PRIORITIES | 4-6 years

Complete Central Avenue, 147th Street to 159th Street

Target for completion: Five years

Linking many major destinations such as Oak Forest Community High School, City Hall, Acorn Public Library, Oak Forest Park District facilities, ball fields, shopping, George Dunne National Golf Course, forest preserves and the Tinley Creek trail system, Central Avenue is an essential connector within the community and the Southland region. Area cyclists have made Central Avenue south of 167th Street a popular route to and from the Old Plank Road Trail and rural Will County. North of 159th Street, traffic calming devices can be paired with bicycle and pedestrian accommodations to create a Central Avenue that is safer for all users of the road.

Scope of work: Install mini-roundabouts at James Drive/ Central Avenue and 151st Street/Central Avenue.

A mini-roundabout is a smaller version of the traditional modern roundabout but operates identically, requiring entering traffic to yield to circulating traffic. The main differences between a mini-roundabout and a standard roundabout are:

1. The size: a mini-roundabout can typically fit within the available right-of-way of a traditional two-lane intersection, with an inscribed circle of 45'-80'.

Mini roundabout, Brighton, Mi. Source: pedbikeimages.org/Dan Burden.

2. The center island's design: a full-sized roundabout's center is raised to prohibit driving over it. A mini-roundabout's center circle is mountable, allowing occasional large trucks, buses and emergency vehicles to drive over it when necessary.

Mini-roundabouts in the Midwest have lowered crash rates and lessened the severity of the crashes that do occur compared to the stop signs or traffic signals they replaced. Plus, they typically improve an intersection's overall vehicle capacity, relieving some congestion on approaching roadways.

Mini-roundabouts installed in a series along a street like Central Avenue will nearly eliminate queueing at intersections, lower vehicle speeds between intersections, mitigate traffic congestion, dramatically lower all crashes, and create a safer, more predictable crossing environment for cyclists and runners.

The city should set a trial period for the mini-roundabouts, particularly on Central Avenue, before permanently installing them. This can be done by using paint (instead of concrete) and temporary signs that educate the public, helps gauge reaction, and fine-tunes the final design. Dimondale, Michigan used this model of implementing mini-roundabouts with good results.

Scope of work: Narrow the center bi-directional turn lane to 10' width; add shared lane markings.

Narrowing turn lanes to 10' will allow Central Avenue's two travel lanes to expand to 13', which when combined with shared lane markings, provide a higher comfort level for drivers and cyclists sharing the lane.

Scope of work: Install landscaped pedestrian refuge medians at these locations:

- 15600 block between the library and the park district
- 15400 block at City Hall
- 15200 block in front of Oak Forest High School

Landscaped medians provide protected queues for pedestrians crossing and help reduce prevailing traffic speeds. Medians can be modeled with paint and moveable planters as a low-cost pilot program.

A landscaped pedestrian refuge median. Source: pedbikeimages.org/Dan Burden

Scope of work: Realign curbs to reduce turning radii.

Tighten corners at Central Avenue's intersections with residential streets to slow turning traffic and shorten pedestrian crossing distances. Realign curbs to a radii of 10' to 15' at residential street intersections.

Scope of work: Complete sidewalks to 6' width on both sides of street, from 147th Street to 159th Street.

While 5' width is the required minimum where a buffer exists between sidewalk and curb, 6' will better accommodate high school foot traffic.

Trail connections

Scope of work: Reconstruct and extend Cicero Avenue's side path, 159th Street to 167th Street.

The side path along the east side of Cicero Avenue is disintegrating, which exacerbates its haphazard routing around roadside utilities. Coordinated with IDOT's Complete Streets policy, the side path should be realigned where needed and extended to 167th Street where future connections to 167th Street businesses and development would be possible.

Scope of work: Improve crossing at 167th Street/Forest Avenue/Twin Lakes trail head.

Narrowing 167th Street travel lanes between Central Avenue and Cicero Avenue to 10' will allow space for a landscaped, raised curb refuge median just west of Forest Avenue wide enough to queue cyclists (and will slow prevailing traffic speeds). Relocating the poorly located crosswalk to refuge island and continuing 8' sidewalk along the Twin Lakes drive to the trail will improve safety and encourage use. Oak Forest should consider jurisdictional transfer as a tool to implement these improvements.

Scope of work: Improve 167th Street equestrian underpass conditions and access to add accommodation for cyclists. Improve drainage at the culvert. Formalize connection to the equestrian path south of 167th Street and west of Lockwood with a crushed limestone-screened trail connection to Lockwood at 167th Street. Extend the connection as a 10' paved side path along the south side of 167th Street east to Laramie Avenue.

Scope of work: Construct paved, multi-use side paths along the north side of:

- 151st Street, Hiele Middle School to Oak Park Avenue
- 147th Street, Central Avenue to Oak Park Avenue

167th Street equestrian viaduct. Source: Steve Buchtel

Incomplete sidewalk along 151st Street. Source: Steve Buchtel

Complete the sidewalk network

Scope of work: Complete the sidewalk network on collectors and arterials.

Scope of work: Upgrade all signaled crossings to countdown pedestrian signals.

Some streets in Oak Forest are low traffic, residential streets where many residents and their families feel comfortable walking and biking. But important destinations are often along collector and arterial streets, where walking in the street as well as crossing them feels uncomfortable and dangerous.

Focusing resources on arterials and collectors leverages the maximum amount of funding assistance from state and county agencies. IDOT's Complete Streets policy mandates the agency to contribute 80% of the costs to construct sidewalks or side paths, and 100% of the costs to move existing utilities. Cook County Highways currently offers 50% cost sharing on sidewalk projects within their ROW.

Safe Routes to School as well as 401 Highway Safety Improvement Program funding is available for pedestrian and bicycling safety through the state, and sidewalks typically score well in federal Congestion Mitigation and Air Quality grant requests.

LONG-TERM PRIORITES | 6-10 years

Cicero Avenue & 159th Street pedestrian environment

Scope of work: Cicero Avenue, 147th Street to 159th Street; 159th Street, Cicero Avenue to Ridgeland Avenue.

Widen sidewalks to 6' minimum standard when adjacent to curb; establish 6' width as a preferred standard for all sidewalks, including segments buffered from the street where possible.

Establish 10' wide travel lanes as a design standard within Oak Forest to slow prevailing traffic speeds, reduce the severity of crashes, and to create space for pedestrian refuge medians at intersections and mid-block.

Use curbed, raised medians, landscaped where appropriate, to shelter pedestrians and cyclists crossing at intersections without signals and mid-block, and to slow through-traffic.

Consolidate non-residential and multi-unit residential access drives to reduce turning conflicts with pedestrians by 50%. (*See Policy Objectives: Access Management Plan*).

Reduce turning radii at all driveways to 15' preferred, 20' maximum at all driveways where delivery by large truck is uncommon; where large truck traffic is expected, reduce turning radii to maximum 30'. Require all 2-way drives more than 20' wide to include a pedestrian refuge median within the crosswalk.

Narrow sidewalk along Cicero Avenue. Source: Steve Buchtel

Heavy truck roundabout, Lynden, Wa. Source: Flickr/WSDOT

Roundabouts

Scope of work: Install standard roundabouts at Cicero Avenue/159th Street, Oak Park Avenue/159th Street

Standard roundabouts typically improve intersection safety and clearance times for all users at high volume intersections. They differ from traffic circles which are only appropriate on low volume, low traffic streets by requiring entering vehicles to yield to circulating traffic. When designed properly, standard roundabouts reduce the frequency and severity of all crashes. They shorten the overall time for vehicles to clear the intersection—typically including emergency response vehicles—and they increase capacity without adding additional queues or lanes. Roundabouts also save money on electricity, gasoline, and emergency response, while reducing airborne and noise pollution. Roundabouts are consistent with the vision of the 159th Street Complete Streets study. Overall, the benefits of roundabouts offer to improve 159th Street's and Cicero Avenue's function as IDOT Strategic Regional Arterials.

A well-designed roundabout can calm an intersection, directing drivers to act more predictably and at slower speeds. With reinforced, mountable aprons, they can easily accommodate tractor trailers which benefit as well from fewer intersection delays. The roundabout will provide safer pedestrian crossings and help set a tone of cautious driving and a higher priority on non-motorized transportation relative to surrounding communities.

These roundabouts will be costly to design and construct. Roundabouts qualify for Highway Safety Improvement Program funding through IDOT when installed in locations with a history of serious and fatal crashes. Oak Forest should collaborate with its neighbor to the southwest, the Village of Tinley Park, to pursue a roundabout at Oak Park Avenue/159th Street. The Village of Tinley has adopted a roundabout design for a high capacity intersection at 183rd Street and Oak Park Avenue, replacing traffic control signals. The 159th Street/Oak Park Avenue intersection shares adjacent property with the two communities. Oak Forest could benefit from Tinley Park's precedence and experience by collaborating with Tinley on pursuing funding and negotiating the necessary agreements with IDOT to pursue the design.

Safe Routes to School objective:

Improve bicycling and walking facilities for Oak Forest students and school employees

Oak Forest is served by four public school districts: 142, 144, 145 and 146; Oak Forest High School in Distict 228; and private faith-based schools. District 144 schools are organized as grade centers; instead of serving only its surrounding neighborhood, each school draws students within particular age groups from all across the district.

Buses play a large role in school transportation at each school, including Saint Damian, the private school included in these recommendations. But so do the automobiles of parents during arrival and release times, congesting the streets around schools and creating an unsafe traffic environment.

Improvements to each school's walking and bicycling environment, accompanied by Safe Routes to School education and encouragement programs, could reduce car traffic during arrival and dismissal. Boosting bicycling and walking numbers could also increase students' physical activity levels which many studies have correlated with better grades and classroom behavior. And encouraging staff as well to bicycle and walk could reduce parking issues and improve employee health.

All of the recommendations generally can be made in the near term, within three years.

Unmarked crosswalk, Ridge Early Childhood Center. Source: Steve Buchtel

FOREST RIDGE SCHOOL DISTRICT 142

Kerkstra Elementary

Grades 1–5
14950 South Laramie

Street crossings at Kerkstra are well marked. But sidewalks surrounding the school measure approximately 4' wide. Children, left to their own choice, will walk side by side, often in groups, and for many families is the preferred facility for children cycling over the street. Widening sidewalks to 8' accommodates and encourages children's' use of the sidewalk, and improves walking and bicycling safety.

Kerkstra lacks bicycle parking racks. Racks should accompany sidewalk improvements.

Ridge Early Childhood Center

Early Childhood/Kindergarten
5151 West 149th Street

While its students are usually considered too young to walk or bicycle to school unattended, the school should consider accommodating parents and caregivers accompanying students to encourage a healthy, congestion-relieving alternative to driving. Installing a bicycle rack near the building entrance could encourage adult trips to school.

Striping a crosswalk across the driveway at 149th Street would improve pedestrian awareness. Paint a stop bar before the sidewalk for exiting traffic.

Consider extending the drive's median island to the roadway's edge, with a pedestrian pass-through at the sidewalk, to better protect adults with children crossing the drive and slow traffic entering and exiting the driveway.

Jack Hille Middle School

Grades 6–8
5800 West 151st Street

Sidewalks along 151st Street to the east, a paved path connection to Covenant Park to the north, and walkable, bike-friendly streets to the south of the school make Hille a good candidate for promoting bicycling and walking to this age group.

Connect the sidewalk between driveways along 151st Street. Stripe crosswalks across the driveways where sidewalks connect.

Lee Foster Elementary

Grades 1–5
5931 West School Street

Ample open space and ball fields to the south offer opportunity to connect Rob Roy Drive to the school with off street paths.

Paint stop bars at driveway exits prior to sidewalk crossings.

Install bicycle parking racks on the north side of the building, and add additional bicycle parking on the south side of the building after constructing access from Rob Roy Drive.

Unmarked crosswalk, Hille Middle School and 151st Street. Source: Steve Buchtel

PRAIRIE HILLS DISTRICT 144

Fieldcrest Elementary

Grades K–5
4100 West Wagman Avenue

Fieldcrest enjoys quiet streets and ample sidewalks. Stripe a crosswalk at bus entrance drive. Provide bicycle parking.

Fieldcrest Elementary bus entrance. Source: Steve Buchtel

ARBOR PARK SCHOOL DISTRICT 145

Kimberly Heights School

Grades EC–K
6141 Kimberly Drive, Tinley Park

Kimberly Heights is located in a subdivision without sidewalks, but with quiet streets suitable for family walks and bicycle rides. And access to the Tinley Creek Trail is less than a quarter mile away. A bicycle rack placed near the entrance could encourage adults to bicycle to school at arrival and dismissal, to the many programs and volunteer opportunities this age group offers, and could encourage staff to bike to work.

Morton Gingerwood School

Grades 1–2
16936 Foster Avenue

Morton Gingerwood also enjoys close access to the Tinley Creek system. Adults are likely to chaperone this age group when walking and biking to and from school.

Relocate the bicycle rack currently on the south side of the building to the employee entrance on south side of building. Install additional parking for up to three bikes near the school's front entrance for visiting or volunteering adults.

Complete sidewalks along Foster Avenue on both sides.

Reconfigure the parking lot in front of the school for reverse angle parking. Space is tight in this lot and, during arrival and dismissal, hectic. Reverse angle parking, while it feels unfamiliar at first, has shown to be no more difficult than parking traditionally; the district requires bus drivers to reverse angle park in the holding lot at Morton Gingerwood. Most importantly, reverse angle parking eliminates the danger of blind spots when leaving the space.

Reconfigure street side parking for reverse angle parking. Move the parking spaces toward the street with parking curbs, relocating the painted walkway between parking curbs and fence.

Reconfiguring for reverse angle parking will not be as simple as restriping. Staff, school board members, and parents will have to be educated regarding its benefits. In addition to discussions with stake holders, this plan recommends that the district host workshops that include practice using reverse angle parking well before a trial implementation.

Scarlet Oak Elementary

Grades 3–4
5731 Albert Drive

Albert Drive in front of Scarlet Oak is nearly 36' wide. A 5' painted median supplemented with moveable pedestrian crossing pylons would narrow the perceived travel lanes for drivers, influencing them to slow down, and it would aid pedestrians crossing the street.

Construct an off-street shortcut to the multi-family residences behind the school along Independence Avenue.

Restripe faded crosswalks at Albert Drive drive entrance and exit.

Relocate bike racks and install additional bicycle parking by front door entrance, between access ramp and the building. Install bicycle parking racks behind the building in conjunction with completing a path connection to Independence Avenue residential units.

Walkway, Morton-Gingerwood School. Source: Steve Buchtel

Arbor Park Middle School

Grades 5–8
17301 South Central Avenue

Relocated from downtown Oak Forest in 2008, Arbor Park's location will always rely on buses to get even this very mobile and able age group to school. But students living nearby are bicycling to school, and adult staff, parents and visitors would benefit from improved bicycling access.

Install bicycle parking by the main entrance to the school in addition to parking on the "upper" west side of the building. An off-street, paved path provides a good bicycle connection to homes east of the school, and the school's only bicycle parking, on the western, elevated side of the school, is difficult and circuitous to access. Ample space south of the entrance, where the path crosses the bus lane, would be an ideal location and minimize conflicts between bikes arriving via the path and students entering the building.

Retrofit curb ramps in western parking lot. Not only are curbed, marked crossings required by federal guidelines to include ADA ramps, but curb ramps will also benefit cyclists.

Replace the raised curb along the bus lane along the buildings' main entrance with a mountable curb. Students board and deboard buses all along the curb face during arrival and dismissal, yet only two small ADA ramps have been installed along the sidewalk, one at the path's connection point, the other in front of the main entrance. A mountable curb improves access to and from the school regardless of where the bus is parked.

Some Arbor Park curbs require ADA ramps. Source: Steve Buchtel

This corner of Arbor Park Middle School would be ideal for additional bike parking. Source: Steve Buchtel

COMMUNITY CONSOLIDATED SCHOOL DISTRICT 146

Fierke Education Center

Grades K–5
6535 West Victoria Drive

Fierke has ample bicycle parking and sidewalk connections. Minor improvements could leverage these assets to replace some automobile traffic at arrival and dismissal.

Stripe all crosswalks at streets intersecting Victoria Drive across from school grounds.

An off-street path provides a shortcut for biking and walking from Ridgeland Avenue. Move its terminus at the school from the overflow parking lot east of the school to the play area where the bicycle racks are located.

Victoria Drive is approximately 36' wide in front of the school, inviting drivers to speed when traffic is light, and maneuver aggressively during arrival and dismissal times. Reduce lane widths with a center median. Installed simply and inexpensively with paint and perhaps moveable pedestrian pylons, medians would also provide safety islands for students crossing Victoria Drive.

BREMEN HIGH SCHOOL DISTRICT 228

Oak Forest High School

Grades 9–12
15201 Central Avenue

The Complete Street recommendations for Central Avenue elsewhere in this plan will significantly improve the bicycling and walking environment around Oak Forest High School. Internal improvements on school grounds will leverage improvements to Central Avenue to encourage students and staff to replace car trips with bicycling and walking.

Currently, the access drive to the school is separated into lanes marked as "drive thru," "drop off" and "bus only." Add a marked bicycle lane left of the 'drive thru" lane.

Improve/expand bicycle parking. Installed on a concrete pad yet wallowing in mud after rains and melting snow, existing bicycle parking inconveniences students and faculty and reinforces the second-class status of bicycling as transportation among teens. Its location, however, is ideal for access from a marked lane on the access drive.

Improve the off-street path around the ball field to a minimum 10' standard, and remove the bollard. Bollards do nothing to discourage improper motorized use of a path, but are often implicated in injuring path users.

"Drive Thru" and "Drop Off" lanes at Oak Forest High School. Source: Steve Buchtel

PRIVATE EDUCATION

Saint Damian School

Grades K–8
5300 West 155th Street

Stripe crosswalks and stop bars at each parking entrance/exit. Stripe crosswalks at Long Avenue.

Move the crosswalk on the east side of Lockwood to the west side of Lockwood. Its current location brings students/pedestrians into the parking lot with no clear path to the school. Continue the crosswalk striping from Lockwood up along the east side of the parking lot, next to the church to create a walkway.

Install bike racks near the school entrance.

St. Damien School, missing crosswalk at Lockwood. Source: Steve Buchtel

Program objective:

Improve skills, knowledge and road-sharing behavior of cyclists, motorists and pedestrians

EDUCATION & ENFORCEMENT

Bicycle and pedestrian safety education

Objective: Partner with regional bicycle education instructors for 2011 programming, including bicycle safety/education demonstrations at ten community events and/or recreation programs.

Description: Oak Forest should partner with regional bicycle education instructors from the Active Transportation Alliance or the League of American Bicyclists to train and encourage the public to bike and walk more frequently and to do so more safely. Instructors provide face-to-face demonstrations to youth, teens and adults at community events and special programs on bicycle safety programs such as how to ride with traffic and how to properly fit a helmet. Instructors should work with partners in the community such as the school and park districts to identify and address local transportation safety concerns. The plan recommends partnering with instructors for ten demonstrations in the first season and growing the program thereafter.

A Bicycle Ambassador attends a community event.

Bicycle Ambassador

Objective: Partner with Active Trans to hire and train a temporary part-time Bicycle Ambassador, possibly as an internship, as a pilot program in 2011. Evaluate the program's outcomes for permanently establishing a summer internship position beginning in 2012.

Description: The City of Chicago pioneered a Bicycle Ambassador program in 2002 to create a core of paid, trained cyclists to provide bicycling assistance, education, small events, safety demonstrations and advice at the festivals, on the streets, and on the trails where cyclists are found during the summer months. Oak Forest's abundance of trail connections, its Metra station, and active Park District are just three opportunities where a part-time Bicycle Ambassador, trained in safe cycling and basic mechanics and armed with information, maps and safety materials, would be a visible and popular benefit to Oak Forest residents and visiting cyclists. An Ambassador could also be a liaison between non-cycling residents and the City's cycling efforts as well as the cycling community.

Safe Routes to School

Objective: Establish Safe Routes to School teams at each elementary and middle school by 2012.

Description: The Oak Forest Bicycle and Walking Task Force should begin to organize Safe Routes to School (SRTS) teams at local schools and/or at the district level that involve stakeholders such as parents, police and public works officials. These teams, once established, should assess biking and walking policies, the walking and biking environment around each school, and determine the encouragement, education and enforcement solutions that will increase the number of children walking and biking to school.

Bicycle safety programs should be considered at all schools. This plan recommends that the city and schools partner with Active Trans for necessary SRTS training, facilitation, resources and materials. Active Trans offers training for local committees, curriculum for integration into school lesson plans, and a biking and walking encouragement activity guide to assist with encouragement programs and travel plans.

IDOT and Illinois SRTS can also provide safety education materials to reinforce bike safety messages. The Voorhees Institute at Rutgers has model policies for walking and for bicycling available at *http://policy.rutgers.edu/vtc/srts/Model%20Walking%20Policy.pdf*.

Safe Routes to School has become a prominent program with the Federal Highway Administration, and in Illinois is a well-funded, though competitive, program. The survey and recommendations can be used to begin applying for Safe Routes to School money in the short term. See Appendix F for grant information.

Law enforcement

Objective 1: The Oak Forest Police Department designates a liaison to communicate with the bicycling community, coordinate bicycle safety and enforcement training to the department, and participate in the Oak Forest Non-Motorized Plan Task Force by 2010.

Objective 2: In consultation with the Oak Forest Police Department, Oak Forest's Non-Motorized Plan Task Force will make recommendations to the City Council to adapt and amend city ordinances for the purpose of promoting and enforcing a safe environment for cycling by 2011. The Active Transportation Alliance can provide training and resource materials.

Description: Enforce traffic laws that improve the safety of bicycling for all residents in Oak Forest police officers are best equipped to respond to bicycle safety and enforcement issues when appropriate training has been provided and local ordinances provide clear, reasonable guidance on enforcement issues.

The Oak Forest Police Department should provide introductory and ongoing trainings on enforcement of the traffic laws that create a safe bicycling environment by 2012. The curriculum should include:

- Rules of the road for bicyclists
- Illegal motorist behaviors that endanger bicyclists
- Most dangerous types of bicycling behaviors
- Most common causes of bicycle crashes
- Importance of reporting bicycle crashes
- Importance of investigating serious bicycle crash sites
- Best ways to prevent bicycle theft
- Advantages to policing by bicycle
- Transportation, health and environmental benefits of bicycling

Involve officers in education efforts to build buy-in and awareness of cyclist and pedestrian issues. Source: Steve Buchtel

Mobility education campaign

Objective: Beginning in 2010, the Non-Motorized Plan Task Force distributes bicycling information:

• Arrange for bicycle information to be reprinted and/or distributed by partner agencies and organizations, utility companies and the private sector.

• Include information with utility bills and city parking sticker renewals.

• Partner with local bike shops in Tinley Park, Orland Park, Palos Heights, and other neighboring communities to distribute publications.

• Partner with local urgent care centers, the Oak Forest Park District, and the Cook County Department of Public Health to distribute information on the health benefits of cycling and walking.

Partner with Oak Forest Community High School to develop materials and distribute information to the student body.

Description: Many bicyclists and motorists do not know or understand the rules of the road for cyclists. Mobility Education Campaigns educate all users of the road, including motorists, pedestrians and bicyclists, on how to legally share the road, creating a safer environment for everyone.

Open Streets Oak Forest, March 13, 2010. Source: Steve Buchtel

ENCOURAGEMENT

Oak Forest bicycle map

Objective: The City, the Park District and the Oak Forest Chamber of Commerce work together to design and publish a free bicycle map in spring 2011 that includes recommended street routes.

Description: A city bicycle map encourages bicycle use by promoting existing on-street bicycle routes and identifying bicycle-friendly routes to important and popular destinations like the parks, schools, libraries, forest preserves and business districts of Oak Forest.

Consider private sector sponsorship for printing the map.

Oak Forest Open Streets

Objective: Oak Forest adopts Open Streets as an annual event to complement the Fleadh and/or other road-closing events.

Description: Oak Forest Open Streets closes street segments within the city to cars and opens the streets for recreation for residents to walk, bike, skate, jog and play.

In March, 2010, Oak Forest debuted its inaugural Open Streets event, closing one mile of Cicero Avenue to motor vehicle traffic between 151st. Street and 159th Street. By piggybacking on the planned street closing for the Oak Forest Fleadth, the city's Irish parade and festival, the city was able to lower costs of the street closure and event promotion. The integration saved money while still providing residents with an opportunity to experience a car-free Cicero Avenue.

Oak Forest bicycle racing

Objective: Identify a bicycle racing partner organization and a bicycle retail partner by 2012.

Description: Bicycle racing has proven to be an exciting, popular sport in the Chicago Southland which has hosted racing in Blue Island, Chicago's Beverly community, Richton Park, Park Forest, and Olympia Fields. Nationally, bicycle racing has boosted the appeal of cycling and raised interest in physical fitness. In Oak Forest, an annual day of road bicycle racing and/or a regular schedule of BMX racing could add a fitness-oriented, competitive event to the city's calendar, provide a permanent recreational facility year-round, and could boost cycling interest and visibility year round.

Oak Forest's extensive grid network and pleasant neighborhoods with yards and sidewalks create an outstanding venue for bicycle racing and spectators. Criterium racing is especially suited for streets like Boca Rio and Arroyo Drive with plenty of run off room for racers, few roadside obstacles and a spectator friendly layout. Racers, support crew and fans would boost local restaurant, retail and lodging activity on race weekends.

The city is well-suited for BMX racing as well. Largely a youth-oriented sport, BMX racing requires a 1/8 mile dirt track that serves as race track during the weekends and a community or park district resource the rest of the week. Regularly scheduled BMX races would bring families and fans region-wide to Oak Forest to race and to watch. Racing will boost cycling numbers among children and particularly teens, who are a difficult group to change attitudes toward cycling.

Both types of racing will also help support a local bicycle shop, a resource that the city currently lacks. Oak Forest should pursue a bicycle shop for its Gateway development, further enhancing the developments' image as a town center and bicycling/transit hub.

Oak Forest resident Kris Lundgren is a multi-year national champion in BMX. Source: Derik Novaes/BMXMania.com

Shop By Foot & Bike

Objective: Develop a summer-long Shop by Foot & Bike program in 2012.

Description: Shop by Foot & Bike programs encourage residents to walk or take their bikes on short errands to local shops, which help add physical activity to residents' daily routines, relieves parking issues, and supports local businesses. With a Shop by Foot and Bike program, retailers offer discounts and/or promotions for car-free shoppers. The Non-Motorized Plan Task Force should pursue partnerships with the retailers and restaurants to encourage shopping by foot and bike in Oak Forest. Bicycle education instructors should offer Shop by Bike classes annually through the Oak Forest Park District, and educate merchants on the advantages of attracting and accommodating bicycle-riding customers and staff. This unique economic development program will encourage and promote more local shopping.

Adequate bicycle parking and safe pedestrian crossings, including safe pedestrian passage through parking lots, are important prerequisites for shopping by foot and by bike; bicycle parking and pedestrian needs should be assessed before the program begins. Temporary bicycle parking and pedestrian space, provided through portable bicycle racks or by roping or coning off areas for temporary racks and pedestrian passage, can be sufficient for special events.

Car-Free Day

Objective: The Non-Motorized Plan Task Force, beginning in 2010, works with several partner agencies, including the Park District, Police Department and Public Works Department to designate one day each year for special programming that encourages residents to bike or walk for local trips.

Description: Car-Free Day is a fun event that promotes car-free travel for local errands and trips on a specific day within the city. Car-Free Day reminds people that biking and walking are feasible forms of transportation in Oak Forest and that it is possible to travel to errands, school and other key destinations without using a car. Promotion and outreach around this event should emphasize the health and environmental benefits of substituting car trips with walking and biking trips.

Programming can include:

- Closing three to four streets to car traffic, perhaps creating a rectangular network providing access to all parts of Oak Forest.
- Inviting merchants to offer special discounts to participants.
- Offering bicycling classes leading up to the event through the Oak Forest Park District.

Bike to the Windy City Thunderbolts, July 2009. Special cycling and walking events that tie in community merchants are fun, encourage active living, and promote local shopping and enterntainment. Source: Steve Buchtel

City and Park District bicycle fleets

Objective: Oak Forest and the Oak Forest Park District each establish a five-bike fleet for employee use on-the job and during breaks, a suitable system for tracking demand and use, and an annual 2-hour bicycle safety class in 2011.

Description: Providing a fleet of bicycles for municipal use, can be considerably cheaper and often more effective than using automobiles. The employee demand for the City of Aurora's municipal bicycle fleet often exceeds the number of bicycles, and locally the directors of Lan-Oak Park District and Tinley Park's public works find that bicycles are more effective for surveying current conditions of facilities and infrastructure. Employees will also improve their health and fitness which has been shown to reduce health insurance costs; the Village of Tinley Park has reduced employee health costs through similar walking programs.

Using contracted bicycle safety instructors from the League of American Bicyclists or Active Transportation Alliance, Oak Forest should offer annual classes for municipal employees covering basic bike safety, simple roadside maintenance, and commuting/carrying by bike. The program could help bolster an Oak Forest bicycle vendor through equipment purchase and maintenance contracts.

Bicycle sharing program

Objective 1: The City collaborates with Southland partners to pilot a BCycle automated bicycle sharing system at Metra stations by 2012 and three other city locations, including one multi-unit residential development, Oak Forest Commons, and Cook County Hospital.

Objective 2: Using GPS-generated usage data, the City determines other locations for bicycle sharing kiosks by 2013.

Description: Automated bicycle sharing kiosks such as Bcycle, today widely used in Chicago, at Saint Xavier University's main campus and Loyola University's Chicago campus, eliminate or reduce much of the administration and maintenance issues that plagued earlier bike sharing schemes. A bike sharing kiosk located at the Metra station would serve transit users arriving for work or recreation, enabling easy, healthful and enjoyable transport over the "last mile" to their destination.

Collaborating with Southland partners connected by rail and/or by trail, the City could explore funding sources that may favor bicycle sharing for larger populations than for a single, medium sized suburban community. A collaborative program of Metra-located kiosks will also support Oak Forest's vision of recreational bicycle trips beginning/ending at its Gateway development, boosting activity for Gateway merchants.

Bcycle bike sharing kiosk in Denver, Co. Bcycle was dveloped in part by Humana, underscoring health care's growing interest in active transportation.
Source: Andrew Duvall

Planning for bicycle sharing goes beyond the purchase of equipment. A bicycle shop should be retained for maintenance issues, and bikes do need to be moved between kiosks semi-regularly and at times recovered. Recurring costs can be covered through advertising space on the equipment.

Evaluation and implementation

EVALUATION

Measure bicycle and pedestrian traffic

Objective: The Non-Motorized Plan Task Force should identify a system for counting bicycles, bicyclists and pedestrians in order to establish benchmarks that indicate measures of progress. For example, the city should conduct annual bicyclist and pedestrian counts at specific intersections that are highly traversed by bicycles and count parked bikes at popular destinations, schools and at the Rock Island Metra station.

Measure bicycle and pedestrian crashes

Objective: Oak Forest should also perform crash analysis on an annual basis. Data collection should be comprehensive, including motor vehicle, bicycle, and pedestrian crashes as well as injury and fatality data. For reference, Appendix G includes bicycle and pedestrian crashes involving motor vehicles 2005-2008 in Oak Forest.

Measure bicycle parking

Objective: The city should also maintain an up-to-date inventory of available bicycle parking. This inventory can be verified on an annual basis. Oak Forest should establish the counts before the Non-Motorized Transportation Plan is implemented so that there is a baseline for comparison.

IMPLEMENTATION

Funding

Objective: The bicycle and pedestrian coordinator establishes a monitoring system of funding sources, funding cycles, and contacts by the end of 2010, and provides a list of potential funders bi-annually to the Task Force to develop, update and maintain an annual funding plan.

Federal programs such as clean air grants, enhancements and recreational trails programs, as well as state bikeways grants have provided nearly all of the funding in the past for non-motorized facilities. The emerging national priorities of wellness and quality of life has created Safe Routes to School funding programs as well as funding through the Center for Disease Control and private foundations such as Robert Wood Johnson and the Kresge Foundation.

Whether private or public, funding cycles vary widely. Once the money is awarded, the administrative process, particularly for federal grants administered through IDOT, can be lengthy, time consuming and frustrating. Integration of recommended projects with other capital projects can streamline costs and timeline substantially, and even open other funding sources. While many of the federal and state funding programs require the local entity to provide matching funds, patience and diligence are often more valuable resources. A list of viable programs for the City is provided in Appendix F.

About the Consultants

Baxter & Woodman

Founded in 1946, Baxter & Woodman is one of the largest regionally focused civil engineering firms in the Midwest. A network of offices provides our clients with local presence and responsive service. Our staff of almost 200 talented engineers, surveyors, technicians, and support personnel has completed projects for more than 500 municipalities and county governments. Dedicated to promoting a sustainable future, Baxter & Woodman incorporates innovative techniques along with tried and true processes. Solutions focus on protecting our natural resources and meeting performance expectations of clients. A learning organization, with employees committed to increasing knowledge, gaining viable experience, and building a stronger company for future generations is who we are. Providing our clients with outstanding service is our pledge.

Active Transportation Alliance

The mission of Active Transportation Alliance is to make bicycling, walking and public transit so safe, convenient and fun that we will shift a significant amount of car travel to clean, healthy options. We advocate for transportation that encourages and promotes safety, physical activity, health, recreation, social interaction, equity, environmental stewardship and resource conservation. And as a non-profit, member-supported organization, our services are within the reach of every community, county or region. When you sign us onto a project, you get an even greater return—you help support our mission to improve active transportation around the region.

Appendices

APPENDIX A | Non-Motorized Plan Task Force

Task Force members

Adam Dotson, City of Oak Forest
Marisa Munizzo, City of Oak Forest
Dave Newquist, City of Oak Forest
John Marquardt, City of Oak Forest
Chrissy Maher, City of Oak Forest
Lt. Michael Shaughnessy, City of Oak Forest Police Department
Cindy Grannan, Oak Forest Park District
Robert Oostema, Arbor Park School District 145
Bob Lukens, Chicago Southland Convention & Visitors Bureau
Howard Pence, Compleat Cyclist
Kris Lundgren, resident/cyclist
Pam Opyd, RSC & Associates

Consultants:

Stephen Amann, Baxter & Woodman
Carolyn Helmke, Active Transportation Alliance
Steve Buchtel, Active Transportation Alliance
Katie Tully, Active Transportation Alliance

Non-motorized task force toured existing conditions September 17, 2009. Source: Katie Tully

APPENDIX B | Sample Complete Streets policy

Source: City of Chicago, 2006

The safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and balanced in all types of transportation and development projects and through all phases of a project so that even the most vulnerable—children, elderly, and persons with disabilities—can travel safely within the public right of way."

Examples of how the policy may be implemented:

- Design and construct right-of-way improvements in compliance with ADA accessibility guidelines.
- Incorporate features that create a pedestrian friendly environment, such as
  - narrower traffic lanes
  - median refuges
  - curb extensions ("bulb-outs")
  - countdown pedestrian signals.
- Improve pedestrian accommodation and safety at signalized intersections by:
  - using good geometric design to minimize crossing distances and increase visibility between pedestrians and motorists
  - timing signals to minimize pedestrian delay & conflicts ≠≠balancing competing needs of vehicular level of service and pedestrian safety (e.g., 2009 version of MUTCD to reduce design walking speed from 4ft./sec. to 3.5 ft./sec.)
- Reclaim street space for other uses through the use of "road diets"
  - e.g., convert 4-lane roadway to 3-lane roadway with marked bike lanes

APPENDIX C | Sample bicycle parking ordinance

Base the number of bicycle parking spaces on 5 percent of required motor vehicle spaces (minimum 4 bicycle parking spaces/maximum 40 bicycle parking spaces, depending on proximity to bike path system).

Exemptions -Single and two-family dwellings; warehousing and distribution; mortuaries; auto service; day care centers; car washes; drive-up establishments and airports.

Location and Design Elements

- Inverted-U structure preferred
- Should accommodate U-locks/chains and shall support a bicycle at two locations
- Thermoplastic powder coating on racks and must be anchored securely to ground per manufacturers specifications
- Bicycle parking should be separated from vehicle parking
  grade differences, landscaping, poles, etc.)
- Spaces shall be 30" x 6' per bicycle with a 5'-wide access aisle from behind. Sidewalk adjacent may serve as access site.
- Spaces should be within 50' of entrance and clearly safe and convenient (lit if necessary)
- Parking areas may be shared by two venues within 50' of one another
- Parking areas should be easily accessible from trails, sidewalks and other alternative modes of transportation

APPENDIX D | Distracted driving ordinance sample

Source: City of Evanston, Ill.

(A) Definitions: For purposes of this section the following terms shall be applicable:

1. "Hands-free device" shall mean an external device that connects to a mobile telephone that allows the user to engage in a telephone call without touching the user's mobile telephone.

2. "Mobile telephone" shall mean a cellular, analog, wireless, or digital telephone capable of sending or receiving telephone messages without an access line for service.

3. "On-board communications device" shall mean a communications system or device that is hard-wired into the motor vehicle.

4. "Use" shall mean talking or listening to another person, text messaging, sending, reading or listening to an electronic message, or browsing the internet.

(B) Except as otherwise provided in subsection (C) of this section, no person shall operate a motor vehicle while using a mobile telephone.

(C) The provisions of this section shall not apply to:

1. Any person using a mobile telephone or on-board communications device for non-personal use in the course of ordinary business in their employment with a City, State or Federal agency or authority.

Penalty: Any person who violates subsection (b) of this section shall be subject to a fine of $50.00, provided however, that if a violation occurs at the time of a traffic accident, the driver may be subject to an additional fine not to exceed $200.00.

APPENDIX E | Bicycle facilities guidance and resources

Bicycle lane design resources

Bike Lane Design Guide, City of Chicago and the Active Transportation Alliance, 2002. *http://www.cityofchicago.org/webportal/COCWebPortal/COC_EDITORIAL/bike_lane.pdf*

Manual for Uniform Traffic Control Devices, Federal Highway Administration, 2009; *http://mutcd.fhwa.dot.gov/*

Guide for the Development of Bicycle Facilities, 3rd Edition; American Association of State Highway and Transportation Officials, 1999. *http://www.transportation.org*

Bike parking resource

Bike Parking for Your Business, Active Transportation Alliance, 2003.
http://www.catsmpo.com/bikeped/ bike_parking_guide_web.pdf

Roundabout information

Turner-Fairbank Highway Research Center,
http://www.tfhrc.gov/safety/00068.htm

Pedestrian and Bicycle Information Center, U.S. Department of Transportation. *http://www.pedbikeinfo.org*

Complete the Streets

National Complete Streets Coalition.
http:// www.completestreets.org

Active Transportation Alliance, *http://www.activetrans.org*

APPENDIX F | Funding sources

Congestion Mitigation and Air Quality Program (CMAQ)

CMAQ is an annual program administered by the Chicago Metropolitan Agency for Planning that funds transportation facilities and programs that show an air quality improvement through the reduction of motor vehicle use. Requires 20 percent local matching funds. Program information: www.cmap.illinois.gov.

Illinois Transportation Enhancements Program

Administered by the Illinois Department of Transportation (IDOT). Illinois Transportation Enhancements Program (ITEP) funds bicycle and pedestrian facilities, traffic-calming strategies, bicycle education programs, and transportation-related beautification and restoration projects. Normally an annual program, with inconsistent award cycles and call for projects. Requires 20 percent local matching funds. Program information: www.dot.il.gov/opp/itep.html.

Surface Transportation Program (STP)

STP assists municipalities with local surface transportation improvements to federally authorized urban (FAU) Routes. Programmed annually, STP can be used for constructing on-street bicycle facilities and traffic calming strategies on FAU routes, pedestrian facilities, off-street multi-use trails and bicycle parking. Administered by South Suburban Mayors and Managers Association (SSMMA). Typically funds up to a maximum of 70 percent of project costs. Program information: www.ssmma.org or call SSMMA Planning Liaison Bud Fleming at 708.922.4677.

Illinois Highway Safety Improvement Program (HSIP)

Administered by IDOT and programmed annually, HSIP is a federal set aside program for funding safety improvements to state and local roads. Within IDOT, 80% of the funding is obligated to state routes, and 20% to local routes. Project awards fund a maximum of 90% of costs. Projects applying for HSIP must show a history of crashes, fatalities and injuries on the facility to be improved. More information is on-line at: http://www.dot.state.il.us/illinoisSHSP/hsip.html

Illinois Bicycle Path Grant Program

State funding administered by the Illinois Department of Natural Resources (IDNR) for the construction and improvement of multi-use trails and facilities. An annual program that requires 50 percent local matching funds; $200,000 award maximum per project per year. Program information: http://dnr.state.il.us/ocd/newbike2.htm.

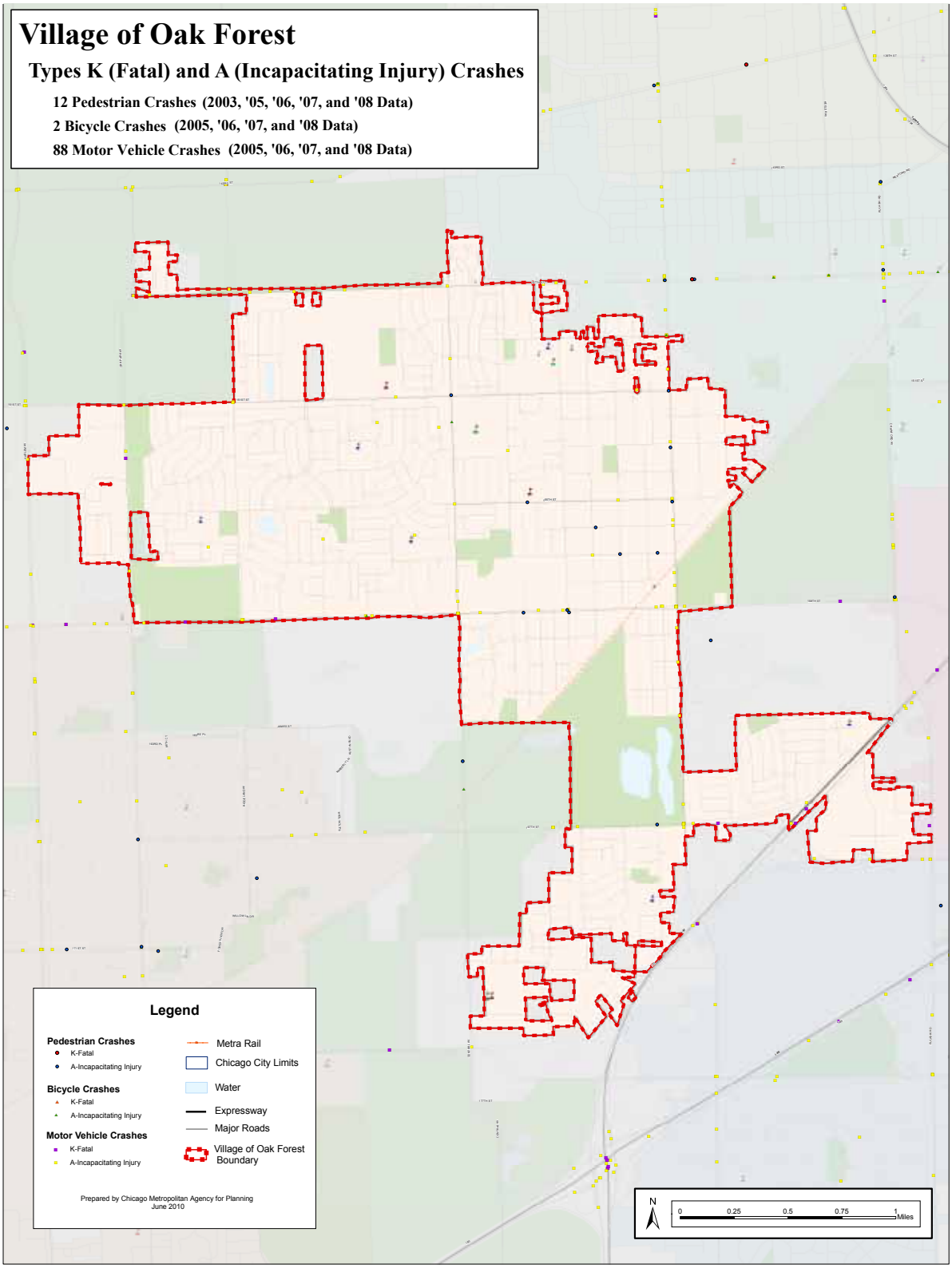
Bikes Belong

A national association of bicycle industry members, Bikes Belong offers relatively small, one-time grants normally $10,000 or less for bicycle facilities and bicycling encouragement programs. Bikes Belong grants satisfy local match requirements of state and federal grant programs. Program information: http://www.bikesbelong.org

Illinois Safe Routes to School Program

Federal funding administered by the Illinois Department of Transportation for infrastructure improvements and non-infrastructure programming associated with safe walking and bicycling to school. The program does not have a regular funding schedule, but when announced requires no local match. Safe Routes to School provides municipalities up to $250,000 in infrastructure funding and school districts up to $100,000 in non-infrastructure funding. Program information: http://www.dot.il.gov/saferoutes/saferouteshome.aspx

APPENDIX G | Bicycle and Pedestrian Crash Data



BAXTER WOODMAN

8840 W 192nd St
Mokena IL 60448
T 708.478.2090
F 708.478.8710
http://www.baxwood.com/

ACTIVE TRANSPORTATION ALLIANCE

9 West Hubbard Street
Suite 402
Chicago, IL 60654-6545
T 312.427.3325
F 312.427.4907
www.activetrans.org